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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,672	04/21/2006	Makoto Sanpei	1210360-089	7213
35684 7590 12/15/2009				
BUTZEL LONG				
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ANN ARBOR, MI 48104				
EXAMINER				
LENIHAN, JEFFREY S				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
12/15/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENT@BUTZEL.COM  
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# Office Action Summary

**Application No.**

10/576,672

**Applicant(s)**

SANPEI ET AL.

**Examiner**

Jeffrey Lenihan

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action is responsive to the amendment filed on 11/23/2009.
2. The objections and rejections not addressed below are deemed withdrawn.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/23/2009 has been entered.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1 and 2 recite that the  $\alpha$ -olefin

oligomer has a number average molecular weight ( $M_n$ ) that is "equal to or greater than 300;" this limitation is inherited by dependent claims 3-6. The original disclosure, however, teaches that the oligomer component has a maximum  $M_n$  of 1400 (see specification ¶¶0013, 0020, abstract). The original disclosure does not support the limitation that the  $M_n$  of the oligomer component may be any value greater than 300, as currently recited by the independent claims.

7. Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 2 state "where R is an alkyl group having 6-10 carbon atoms with a number average molecular weight of equal to or greater than 300..." As currently written, the examiner takes the position that it is unclear whether the claimed  $M_n$  is intended to be a property of the oligomer or the R group. Based on the specification (see ¶¶0013), the examiner suggests amending the claim to recite "wherein the oligomer has" a  $M_n$  in the claimed range.

8. Similarly, claims 7 and 8 state that R is an alkyl group having  $M_n$  in the range of 300-1400; the examiner suggests amending each claim to recite the damper of its parent claim, wherein the  $\alpha$ -olefin oligomer has a  $M_n$  in the claimed range.

#### ***Claim Rejections - 35 USC § 103***

9. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikemoto et al, US2002/0068797 (of record), in view of Yang et al, US2004/0106723 (of record), and Hong, US2004/0226393 (of record).

10. The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference. The examiner notes that new claims 7 and 8 recite the range for  $M_n$  that was previously stated in claims 1 and 2.

### ***Response to Arguments***

11. Applicant's arguments filed 11/23/2009 have been fully considered but they are not persuasive.

12. Applicant states that Ikemoto is directed towards the field of automobile hoses; the examiner disagrees with this allegation. It has been held that "a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments," *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.). As noted in previous Office Actions, Ikemoto explicitly states that the rubber composition of US2002/0068797 may be used in rubber vibration insulators (§0036). Ikemoto therefore is not restricted to the production of hoses.

13. Regarding  $M_n$  of the claimed oligomer component: It has been held that in the case where the claimed ranges overlap or lie inside ranges disclosed in the prior art, a *prima facie* case of obviousness exists; see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); see *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (MPEP § 2144.05). As noted in the previous Office Action, Yang discloses the use of oligomers of  $C_6$  to  $C_{14}$  olefins having a  $M_n$  of 100-21,000 as a plasticizer for polyolefin-based polymers. This range overlaps the claimed  $M_n$  ranges of greater than or equal to

300 (in claims 1, 2) and 300-1400 (in claims 7, 8); it is therefore insufficient to merely argue that the range disclosed by Yang encompasses values that lie outside the range of 300-1400. Furthermore, the independent claims do not recite an upper limit for the  $M_n$ ; applicant's statement that oligomers having  $M_n$  greater than 1400 are useless in the claimed invention (see remarks page 8, lines 16-17) therefore are not germane to the patentability of the invention of the independent claims. The examiner therefore maintains the position that, barring a showing of factual evidence demonstrating unexpected results commensurate in scope with the claimed invention, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to choose the overlapping portions of the claimed range and the range disclosed by Yang.

14. Applicant argues that the improvements disclosed by Yang are not germane to the invention of Ikemoto; the examiner disagrees with this allegation. As conceded by applicant (see remarks page 8, last sentence), Yang discloses improved processability as a result of the addition of the plasticizer. Ikemoto specifically states that additives may be added to improve processability (¶0034). The examiner therefore maintains the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the C<sub>6</sub>-C<sub>14</sub> oligomer-based plasticizer of Yang to the composition of Ikemoto, in order to improve its processability.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Lenihan whose telephone number is (571)270-5452. The examiner can normally be reached on Monday through Thursday from 7:30-5:00 PM, and on alternate Fridays from 7:30-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemel/  
Primary Examiner, Art Unit 1796

/Jeffrey Lenihan/  
Examiner, Art Unit 1796

/JL/